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15 October 2012

Online at <https://mpra.ub.uni-muenchen.de/42402/>

MPRA Paper No. 42402, posted 21 Nov 2013 05:26 UTC

CEO Compensation and Bank Performance

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Abstract

This study sets out to discover the determinants of compensation of the chief executive officers in the banking industry of Pakistan. Accounting based performance measures and size of the firm have been used as predictors. Results of the study are consistent with arguments, suggesting significant and positive impact of size (assets) of the firm on CEO compensation while no association is found with either of the performance measure of the firm except income before tax (IBT). Return on Assets and Return on Equity failed to explain the given phenomenon. The study further elaborates that number of employees (NOEMP) greatly influences on CEO compensation but negatively. This relationship may be due to the unique characteristics of Pakistan's social and economic structure.

Keywords: Compensation, Corporate Governance, Corporate Control, Return on Assets, Return on Investment

1. Introduction

It is a general perception that the compensation of chief executive officers is very high and in recent years considerable attention has been given to their rising pay levels. Corporate sector gives explanation for the rising trend in top executive pay over the past two decades or so, since shareholder value maximization became the objective of management. Separation of ownership and management as discussed in detail by Jensen (1976) gives this idea that if management is compensated adequately,

expropriation of wealth will be less. Rules of the game are very simple. Agent's performance is evaluated by various means and then compensated. Now the questions arises that whether companies Board of Directors (BOD) are creating more value for shareholders in Pakistan and compensation received by them are justifying it? A thorough understanding of the determinants of BOD compensation in financial sector of Pakistan is critical for the development and growth of this sector as banking sector growth and development is important specially for developing economies where market oriented financial system is either at early stage or not showing any progress to meet various business requirement.

From Nationalization to Privatization in Pak Financial Sector

The financial sector showed very poor performance during the period of 1972 to 1990 because of nationalization in 1970s and very poor governance culture which developed the heavy burden of nonperforming loans, the political pressures to grant loans to selected people, overstaffing and lack of interest of management in the overall performance of banks.

In 1990s, Pakistan began the process of financial liberalization and government decided to privatize all nationalized banks, except National Bank of Pakistan. Rest of the banks were privatized and given to various private investors. Now banks are not under bureaucratic control rather management of banks are facing competition from new local banks and international banks working in Pakistan.

Pakistan's banking system struggled to maintain viability in the 1990s. The main goal of privatization was to achieve good governance; hence board of directors were concerned with the performance of banks. Performance can not only occur by controlling non performing loans but also of overhead, managing risk and allocation of credit as per requirement of various economic sectors, and by following the policies of State Bank of Pakistan.

In that situation financial sector was being reformed from top to bottom where they also had to concentrate on each and every aspect which caused problem. When banks were nationalized, compensation of directors was also part of it. State Bank of Pakistan (SBP) issued updated Prudential Regulations in 2011 for commercial banking, covering four categories i.e Risk Management, Corporate Governance, Customer Due Diligence and Anti Money Laundering, and Operations.

Now, some of the major families in Pakistan have banks other than manufacturing companies. They transfer CEOs from one company to another or one company to bank. This study is an effort to find out whether compensation of these CEOs is based on bank performance. Acceptance of this hypothesis will lead to a conclusion that compensation is not based on political or any other reason.

2. Prior Research

A lot of research has been done to explore the determinants of executives' compensation. In most of the studies, measures of performance and size of the firm have been used to determine the CEO compensation (Nourayi and Daroca, 2008; Hill and Phan, 1991; Ciscel, 1974; Agrawal, Makhija, and Mandelker, 1991; Lewellen, Loderer, Martin, and Blum, 1992; Barros and Nunes, 2007; Conyon, Gregg, and Machin, 1974).

Majority of the studies, conducted on executives' compensation, evaluated significant and positive relationship between CEO compensation and size of the firm (Nourayi and Mintz, 2008; Firth, Lohne, Ropstad, and Sjo, 1996; Ueng, Wells, and Lilly, 2000; Hill and Phan, 1991; McGuire, Chiu, and Elbing, 1962; Canarella and Gasparyan, 1992; Sigler, 2003). When it comes to pay-performance relationship, few studies have established a significant positive connection (Murphy, 1985; Lewellen and Huntsman, 1970; Hogan and Sigler, 1998). However, some of the studies have described that the connection between executives' compensation and performance of the firm is either non-existent or extremely weak (McGuire et al., 1962; Cosh, 1975; Leonard, 1990; Main and Johnston, 1993; Meeks and Whittington, 1975). This study aims to investigate the impact of size and performance of the firm on Chief executive officer Compensation in case of banking sector of Pakistan.

Considerable attention has been given to high and rising pay levels of chief executive officers. Critics argue that the compensation of chief executive officers is very high and it reduces the value creation of stock holders who are actual owners of the firm. Critics believe that compensation level should be in accordance with the performance of the firm and senior executives pay level should be set in a way that motivates them to make strategies that are in the best interest of shareholders. Therefore, there is a need of precise relationship between chief executive officers compensation and those variables that play a significant role in determining the executive compensation.

As mentioned above, abundant research has been carried out to find out the determinants of chief executive officers compensation but there is a lack of precise investigation to analyze the determinants of chief executive officers in Pakistan. In this connection, the objective of this research is to find out the determinants of chief executive officer compensation in banking industry of Pakistan. The study uses accounting based measures such as return on assets, return on equity, Profit Margin and Income before tax along with measures of size (assets and number of employees) as predictors of CEO compensation (Cash based).

Nourayi and Mintz (2008) investigated the association between performance of the firm, CEO compensation and their tenure. They also examined relationship between pay and performance for CEOs serving in their last year as CEO and those who have just taken charge and are in their first year as CEOs in the firm. Two measures of compensation were used in their study as dependant variables that were cash compensation and total compensation. Logarithm of sales was used as measure for firm size. Two measures of performance were used first was accounting based measures such as return on assets and return on equity and second was market based measures such as share holders return. Log transformation of general model was used to reduce the problem of heteroscedasticity. Final sample of 2601 observations from 1416 firms was taken. Findings indicate that pay of less experienced chief executive officers was more influenced by the performance of the firm. It was also found that behavior of total compensation and cash compensation was quite different to the measures of the performance which showed that performance of firm and cash compensation were positively correlated while performance of the firm was negatively correlated to total compensation. Size of the firm was found to be significant explanatory variable for total and cash compensation despite of chief executive officer's tenure and firm performance.

Ueng, Wells, and Lilly (2000) disclosed the impact of the CEO influence above the board of directors on CEO compensation for both big and small firms. Sample of small firms was taken from compact disclosure and big firms from fortune 500 companies. Chief executive officer compensation incorporated both salary and bonus. Sample size of large firms was 468 while the sample size of small firms was 424. Small firms were explained which had assets of less than \$250 million. Simple linear regression technique was used to test hypotheses. Logarithm of Compensation (log COMP) was used as dependant variable while firm size, growth rate; performance and CEO influence over the board were taken as independent variables.

Results of the study revealed that CEO pay was significantly and positively related with firm size for small firms, remaining variables in small firms were failed to explain CEO compensation. CEO influence had no significant relationship with CEO compensation for small firms. In large firms, it was totally different i.e. CEO influence had positive impact on CEO compensation. Sales growth rate was found insignificant. Firm performance, measured by return on assets, showed significance relationship with Chief Executive Officer Compensation for large firms; firm size was also significant and positively and strongly related with CEO compensation.

Main (1991) accomplished a study which explored the relationship between shareholders wealth and CEO compensation with additional independent variables such as number of employees, pay to assets and turnover of the firm. Sample of two hundred and forty one (241) largest industrial firms was taken for the study and simple linear regression technique was used to find out results. Finding of the study indicated no evidence of correlation between compensation and firm size; sales turnover had the same behavior as of assets in determining CEO compensation (No relationship).

Number of employees also revealed the same results. Finally, shareholders return had significant link to the chief executive officers compensation.

Ciscel (1974) conducted the study to investigate the relationship between pay and performance of CEO compensation with five predictors such as size, sales revenue, growth, managerial concern and assets of the firm. Sample of two hundred and fifty (250) largest industrial companies were taken for this study and simple linear regression technique was used. Results revealed that executive compensation had strong and consistent relationship with return (market value of common stock), but sales had modest impact on chief executive officer compensation. Assets and sales were not considerably dissimilar from the correlations with net profits for the CEO reward of the senior officer. The number of human resources did not show strong impact on CEO compensation. There was also no positive relationship between CEO pay or compensation and tenure of the chief executive officer.

3. The Determinants of Chief Executive Officers' Compensation

Abundant research has been performed to find out the determinants of chief executive officers compensation but there is a lack of precise investigation to examine its determinants in Pakistan. For board of directors, it is necessary as part of banking regulation that they must have management experience of at least five years at senior level and must be familiar with the banking field. Minimum qualification is graduation but added qualification if banking and finance is preferred. For chief executive officers at least fifteen years of banking experience is required and work experience at senior level in banking sector either in Pakistan or abroad. As per banking regulations in Pakistan, the remuneration of a director or chairman is determined by the Board of Directors in the annual general meeting in accordance with the provisions in the company's articles. A comprehensive understanding of internal compensation system is vital to the development of organization as well as to understand the behavior of individual, working in decision making capacity. The objective of this research is to investigate the determinants of chief executive officer compensation in banking industry of Pakistan.

The data was obtained from published audited annual reports of the banks listed on Karachi stock exchange during 2000 to 2009. Cash Compensation of chief executive officer, Assets, Number of employees and Income before tax are available in the annual reports while return on assets, profit margin and return on equity were calculated based on the data available.

Most of the previous studies have been done by using the data of different industries together but this study aims to focus only on one industry i.e. banking sector of Pakistan. All the banks have been included in the sample whose data is available. Total sample of 128 observations was used in this study.

Empirical investigation tell us that total asset of the firm (TOTAST), number of employees (NOEMP), return of assets (ROA), return on equity (ROE), profit margin (PM) and income before tax (IBT) affect the compensation of chief executive officer (CCOMP). In this research we are interested to find which variables are affecting CEO compensation after liberalization of financial sector in Pakistan.

Due to multicollinearity between sales (Interest income) and assets only one of them is taken. Total assets of the firm (TOTAST) along with number of employees (NOEMP) are taken as measures of firm's size, which have also been taken as measure of firm size in previous studies (Main, 1991; Nourayi and Daroca, 2008).

Return on assets (ROA) and return on equity (ROE) have been used broadly as accounting based measures of performance of the firm in previous studies conducted on executive compensation (Canarella and Gasparyan, 1992; Duru and Iyenger, 1999; Hogan and Sigler, 1998; Nourayi and Mintz, 2008; Tai, 2008; Firth et al, 1996; Sigler, 2003; Nourayi and Daroca, 2008; Lewellen et al, 1992; Jiang et al, 2009; Ely, 1991). Another two accounting based measures of the performance of the firm are profit margin (PM) which is calculated as Net Income before tax divided by total interest income and Income before tax (IBT) which is taken as annual income before tax in millions of Pak rupees. Description of variables is given in table 1.

Table 1: Description of the Variables

Sr. No.	Variables	Description
1	CCOMP	Compensation of Chief Executive Officer which includes salary, perks and special benefits)
2	TOTAST	Total assets of the firm
3	NOEMP	Total number of temporary and permanent staff except outsourced employees
4	IBT	Income before tax in Pak rupees
5	ROA	Return of Assets, calculated as net income after tax divided by total assets
6	ROE	Return on Equity, calculated as net income after tax divided by total equity
7	PM	Profit Margin, calculated as net income before tax divided by total interest income

This study argues that there is a significant relationship between size of the firm and CEO compensation. This study also investigates the relationship between CEO pay and accounting based performance of the firm and argues that accounting based performance of the firm and CEO compensation have no relationship.

$$CCOMP = \alpha + \beta_1 (\text{Assets}) + \beta_2 (\text{Employees}) + \beta_3 (\text{ROA}) + \beta_4 (\text{ROE}) + \beta_5 (\text{IBT}) + \beta_6 (\text{PM}) + e \quad (\text{Model 1})$$

The model was estimated through the pooled data of annual audited accounts of all banks listed on Karachi Stock Exchange during 2000 to 2009.

4. Empirical Findings

Table 2: Descriptive Statistics of Variables Used in the Regression Analysis

Variables	N	Minimum	Maximum	Mean	Std. Deviation
CCOMP	128	3.2	112.16	25.062	23.675
TOTAST	128	4.03	944.23	176.251	192.449
NOEMP	128	152	18536	4086.796	4336.600
IBT	128	-16858.34	28061	3636.138	6841.114
ROA	128	-9.18	4.95	0.730390	2.147
ROE	128	-276.25	79.08	11.05859	37.349
PM	128	-1.76	0.87	0.161015	0.4195
Valid N (list wise)	128				

Table 2 provides a summary of the descriptive statistics of the dependant variables and predictors of the sampled companies. Cash compensation (CCOMP) has the mean value of 25.06, suggesting that the average annual cash compensation of chief executive officers in banking sector of Pakistan is 25 millions. The table shows huge difference between minimum and maximum cash compensation paid to CEO.

The Table 2 describes that average total assets (TOTAST) of the banks are 176 million Pak rupees in which the minimum value is only 4 million while maximum is 944 in Pak rupees. It indicates that all the banks in Pakistan are not of equal size. Same is the case with number of employees (NOEMP) having an average of 4087. This table also suggests that all the banks operating in Pakistan are not profitable as minimum value of income before tax shows an annual loss of 16.8 billion rupees. Due to negative income before tax for some banks same is the behavior of return on assets, profit margin and return on equity.

Table 3 shows the correlation between executive cash compensations and all predicting variables, showing that there is a positive and moderate correlation between cash compensation and total assets (TOTAST) of the firm (42.3%). Correlation between number of employees (NOEMP) and cash compensation is weak. Income before tax (IBT) is also positively correlated to cash compensation however the correlation is weak, showing correlation coefficient of 25.9%. The table further elaborates that no significant correlation exists between cash compensation of chief executive officer and accounting based performance measures of the firms. Significant and strong relationship has been found between total assets of the firm and number of employees of the firm as it was expected showing

correlation coefficient of 91.2% which explains that number of employees increases with the increase in total assets of the firm. Size of the firm (Assets) and income before tax are also significantly and positively correlated to each other showing strong correlation coefficient of 84.2%, that means the banks bigger in size in terms of total assets record higher after tax profits than the banks smaller in size.

Table 3: Correlation Matrix

		CComp	Assets	Employees	IBT	ROA	ROE	PM
Pearson Correlation	CCOMP	1	0.423	0.200	0.259	0.019	-0.042	-0.030
	TOTAST		1	0.912	0.842	0.318	0.230	0.352
	NOEMP			1	0.767	0.284	0.241	0.358
	IBT				1	0.517	0.445	0.520
	ROA					1	0.712	0.867
	ROE						1	0.646
	PM							1
Sig. (1-tailed)	CCOMP	.	0.000	0.012	0.002	0.415	0.318	0.367
	TOTAST		.	0.000	0.000	0.000	0.004	0.000
	NOEMP			.	0.000	0.001	0.003	0.000
	IBT				.	0.000	0.000	0.000
	ROA					.	0.000	0.000
	ROE						.	0.000
	PM							.
N	CCOMP	128	128	128	128	128	128	128

The results in table 4 show that both assets and number of employees are significant variables. However the standardized coefficient of assets (0.205) and t statistics (7.98) is higher than all the other variables indicating that total assets is the major contributor in the model. It means CEO compensation in banking industry of Pakistan is very much dependant on total assets of the bank. Number of employees also significantly contributes to the model; however its contribution is less than the total assets. Negative coefficient of employees suggests that compensation of CEO will decrease with the increase in number of employees which is quiet surprising. This relationship may be due to the unique characteristics of Pakistan's social and economic structure So, significance of the assets and number of employees point out that size of the firm has significant impact on the cash compensation of CEO in the banking industry in Pakistan.

Initially there were six determinants, including accounting based variables. Out of all other variables, only Income before tax (IBT) is found to be significant at 10 percent. The results of insignificant variables are not reported here.

Table 4: Predicting the Cash Compensation of Chief Executive Officers

	Coefficient	Std. Error
Intercept	17.51** (7.04)	2.436
TOTAST	0.205** (7.988)	0.026
NOEMP	-0.006** (-6.199)	0.001
IBT	-0.001* (-1.868)	0.001
No. of observations	128	
Adjusted R2	0.394	

**, * Significant at the 5 and 10 percent levels, respectively
t statistics are in parenthesis .

5. Conclusion

This study aims to investigate the significant impact of size and performance of the firm on Chief executive officer Compensation. For this purpose accounting based measures such as return on assets (ROA), return on equity (ROE), Income before (ITB), Profit margin (PM) are used as performance measures of the firm, while total assets (TOTAST) and number of employees (NOEMP) are used as measures of size of the firm. Both size and performance measures are used as independent variables using linear regression model. CEO cash compensation (including base salary, bonus, perks and special benefits) has been used as dependent variable.

Findings of the study revealed that there is a significant and positive correlation between total assets of the firm and CEO cash compensation and no significant correlation was found between number of employees and cash compensation of chief executive officer. Income before tax was also positively correlated to chief executive officer cash compensation. Significant and strong relationship has also been found between total assets of the firm and number of employees of the firm showing that number of employees increases with the increase in total assets of the firm.

Study further elaborated that total assets was the major contributor in the model which means chief executive officer compensation in banking industry of Pakistan is very much dependant on total assets of the firm having significant and positive impact.

Surprisingly, negative impact of number of employees was found on the CEO cash compensation, suggesting that CEO compensation decreases as the number of employees' increases. Significance of the assets and number of employees pointed out that size of the firm has significant impact on the cash compensation of CEO in the banking industry of Pakistan.

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